Claims

What is claimed is:

1. A method comprising steps of:

    (a) positioning a data surface adjacent a head mounted onto an actuator; and

    (b) determining a track range for the surface partly based on several lateral positions sensed while urging the actuator laterally against a stop.

2. The method of claim 1 in which the positioning step (a) includes steps of:

    (a1) simultaneously writing a co-rotatable stack of several discs in a multi-disc writer; and

    (a2) removing a selected one of the several discs from the co-rotating stack, the selected disc including the data surface.

3. The method of claim 1 in which the positioning step (a) includes a step (a1) of mounting a disc that includes the data surface onto a spindle assembly, the data surface containing a prewritten servo pattern (PSP).

4. The method of claim 1 in which the positioning step (a) includes a step (a1) of positioning the actuator and the head relative to the data surface so that system tracks on the surface are written with a head/track skew of about 0°.

5. The method of claim 1 in which the determining step (b) includes a step (b1) of reading from a lowest-numbered track that the stop permits the head to access.

6. The method of claim 5 in which the determining step (b) further includes a step (b1) of designating a guardband that includes the lowest-numbered track that the stop permits the head to access, the guardband being adjacent to one side of the track range for the surface.

7. The method of claim 1 in which the determining step (b) includes a step (b1) of designating a track range limit that is based on the several lateral positions and on a predetermined design margin wider than one track, the margin derived from a known mechanical tolerance.

8. The method of claim 1, further comprising a step (c) of deriving another surface's track range partly based on the several lateral positions sensed in the determining step (b).

9. The method of claim 1 in which the determining step (b) includes a step (b1) of biasing an arm of the actuator against the stop.

10. A method comprising a step (a) of urging an actuator against a stop while identifying each of several tracks using a head supported by the actuator.

11.   The method of claim 10 in which the urging step (a) includes a step (a1) of reading from a highest-numbered track that the stop permits the head to access fully.

5   12.   The method of claim 10, further comprising a step (b) of selecting a most extreme one of the track identifications from the urging step (a).

13.   The method of claim 10, further comprising a step (b) of using the track identifications from the urging step (a) to estimate an offset between a center of the several tracks and a center of rotation of the several tracks.

14.   The method of claim 10, further comprising a step (b) of determining a nominal track range limit partly based on the track identifications from the urging step (a).

15.   The method of claim 10 in which the positioning step (a) includes a step (a1) of mounting a disc that onto a spindle assembly, the disc containing a prewritten servo pattern (PSP) including the several tracks.

16.   The method of claim 10 in which the positioning step (a) includes steps of:

(a1)   rigidly supporting the stop with a base; and

(a2)   rotatably mounting the actuator and a disc containing the tracks onto the base.

17. The method of claim 10, further including a prior step of designating a system track band that includes a block of several annular system tracks and at least one guardband track on each side of the block.

5   18. The method of claim 10, further including a prior step of designating a system track band that includes a block of several annular system tracks at a position where a head/track skew is about 0°.

19. A device containing a multitude of data storage tracks, comprising:
10   an actuator supporting a head that has a range of motion;
          a stop defining a limit on the head's range of motion such that several of the tracks are each only partly accessible within the head's range of motion; and
          a controller configured to use the stop to designate a guardband that
15   includes the several partly-accessible tracks.

20. The device of claim 19 in which the guardband further includes several adjacent, fully-accessible tracks.

20   21. The device of claim 19 in which the controller is further configured to execute servo code that prevents any host command from accessing any tracks within the designated guardband.

22. The device of claim 19 further comprising a plurality of discs written
25   *ex situ*, each of the discs including a data surface that contains some of the several partly-accessible tracks.